1 PRODUCT AND COMPANY IDENTIFICATION

Kinder Morgan, Inc
500 Dallas St Suite 1000
Houston, TX 77002

Emergency Telephone Number
1-888-763-3690
CHEMTREC
1-800-424-9300

Product Name: Natural Gas Condensate

2 HAZARDS IDENTIFICATION

Potential Health Effects

EMERGENCY OVERVIEW: Flammable Liquid. Harmful or fatal if swallowed and may cause lung damage if aspirated. Causes skin and eye irritation. Keep away form children.

EYE EFFECTS: May cause eye irritation.

SKIN EFFECTS: Contact may irritate or burn skin. Repeated contact my cause skin to become dry and scaly.

INHALATION EFFECTS: High vapor concentrations are possible and can be hazardous on single exposures. Overexposure may cause weakness, headache, nausea, confusion, blurred vision, drowsiness and other central nervous system effects. Extremely high level exposure may result in dizziness, irregular heartbeat, coma, collapse and death.

INGESTION EFFECTS: If aspirated following ingestion, severe lung irritation and pulmonary edema may occur. Aspiration may also result in central nervous system depression. Serous, permanent lung damage may result. Nausea, vomiting, diarrhea, or abdominal pain may occur following ingestion.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS Registry Number	Typical %
N-Butane	106-97-8	0-5%
Isopentane	78-78-4	0-30%
N-pentane	109-66-0	0-30%
N-Hexane	110-54-3	0-35%
Heptanes-Decanes (C7-C10)	Not Listed	0-40%
Benzene	71-43-2	0-3%
Hydrogen Sulfide (H2S)	7783-06-4	0-1%

4 FIRST AID MEASURES

First Aid Procedures

EYES: Flush immediately with water for at least 15 minutes. Seek medical attention promptly.

SKIN: Wash with soap and water. If redness or swelling develops, obtain medical attention. Immediately remove soaked clothing. Wash clothing before reuse.

INHALATION: Move person to fresh air. If not breathing. Give artificial respiration. And obtain medical assistance.

INGESTION: Obtain medical assistance. Small amounts that accidentally enter mouth should not be rinsed out until the taste is gone.

5 FIRE FIGHTING MEASURES

Flammable Properties

Auto-ignition Temperature		495 F
Flash Point		78-105 F
Flammable Limits-	Upper	40% v/v
	Lower	5% v/v

Flammability Classification

Flammable Liquid

Suitable Extinguishing Media

Foam, dry chemical powder, carbon dioxide.

Special Fire Fighting Procedures

Wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA).

6 ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

LAND SPILL: Eliminate all sources of ignition. Remove leaking containers to a safe area. Contain and remove by mechanical means. Guard against contamination of water supplies. Report spills to appropriate authorities. Dispose of in accordance with Federal, State, and Local regulations.

WATER SPILL: Report spills to appropriate authorities. Dispose of in accordance with Federal, State, and Local regulations.

7 HANDLING AND STORAGE

Handling and Storage

Ground and bond all transfer and storage equipment. Drums must be grounded / bonded / equipped with self-closing valves, pressure vacuum bungs and flame arrestors. Store away form ignition sources in a cool area. Outside or detached storage is preferred. Containers should be labeled: **FLAMMABLE. VAPOR HARMFUL.**

When handling, use non-sparking tools and equipment.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Airborne Exposure Guidelines

	OSHA PEL		ACGIH TLV		NIOSH REL	
COMPONENT	**TWA**	**STEL**	**TWA**	**STEL**	**TWA**	**STEL**
N-Butane	N/A	N/A	800 ppm	Varies	800 ppm	N/A
Isopentane	1000 ppm	N/A	600 ppm	N/A	120 ppm	610 ppm
N-pentane	1000 ppm	N/A	600 ppm	N/A	120 ppm	610 ppm
n-Hexane	500 ppm	N/A	50 ppm	N/A	50	N/A
Heptanes-Decanes(C7-C10)	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	1 ppm	5 ppm	0.5 ppm	2.5 ppm	0.1 ppm	1 ppm
Hydrogen Sulfide	N/A	N/A	10 ppm	15 ppm	N/A	10 ppm

Engineering Controls

Assure adequate natural or mechanical ventilation. Eliminate all sources of ignition.

Eye / Face Protection

Use full-face shield and chemical goggles

Skin Protection

Use impervious gloves, boots and whole-body protection

Respiratory Protection

Approved respiratory protection must be used when vapors or mist concentrations are unknown or exceed the TLV. Avoid prolonged or repeated breathing of vapors or mists.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Colorless
Odor	Hydrocarbon, Rotten egg if H2S is present
Boiling Point/Range	Variable
Evaporation Rate	<I
Upper/lower Flammability	Not Available
Vapor Pressure	12-26 psia @100 F
Vapor Density (air=1)	>1
Specific Gravity	0.50-0.75
pH	N/A
Solubility in Water	Negligible

10 STABILITY AND REACTIVITY

Stability: This product is stable

Incompatibility: Incompatible materials and conditions to avoid: Avoid fluorine chlorine and strong oxidizers. Also keep away form heat, sparks, flame and static electricity.

Hazardous Decomposition Products: Incomplete burning can produce carbon monoxide.

11 TOXICOLOGICAL INFORMATION

Toxicological Information

Exposures to light hydrocarbons as in this product have been associated with effects to the central nervous system, peripheral nervous system, liver, and kidneys in animal studies. It is unclear from these studies if humans are expected to experience the same effects. Observing good industrial and personal hygiene practices can minimize potential risks to humans. The following constituents of natural gas condensate pose significant risks to humans exposed to this product at high levels for long periods of time:

Benzene- Benzene is a known human carcinogen. A high-level exposure for many months to years has been shown to cause leukemia and other blood diseases.

n-Hexane- Excessive exposure to n-hexane is associated with peripheral neuropathy. Initial onset may be delayed for months to years from exposure onset and is characterized by bilateral sensory numbness and distal extremity tingling or burning. N-hexane neuropathy is also associated with muscle weakness in the fingers and toes possibly extending to the arms and legs. Concurrent exposure to methyl ethyl ketone or methyl isobutyl ketone may enhance the neurotoxic effects of n-hexane.

Toluene- Regular overexposure of workers to toluene has been shown to cause detriments in color vision. Studies in laboratory animals have demonstrated CNS, liver, and kidney damage as well as hearing loss following long-term inhalation exposure to high levels of toluene. Intentional inhalation of high concentrations of toluene has been associated with these same effects in humans.

References:

HSDB (2006) Benzene

HSDB (2006) Toluene
HSDB (2006) n-Hexane
ATSDR (2005) Toxicological Profile for Benzene- Draft for Public Comment
ATSDR (1999) Toxicological Profile for n-Hexane
ATSDR (2000) Toxicological Profile for Toluene

12 ECOLOGICAL INFORMAITON

Ecotoxicological Information
The individual components of gasoline. undergo biodegradation in soils and water; however, the rate of degradation is greatly influenced by the amount of the hydrocarbon substrate and a number of site-specific environmental factors, including temperature, oxygen content, moisture content, nutrient content, salinity, and pH. Volatilization from water surfaces is expected to be an important fate process for gasoline. The estimated volatilization half-lives for alkanes and benzene, toluene, ethylbenzene, xylene (BTEX) components were predicted as 7 days in ponds, 1.5 days in rivers, and 6 days in lakes. The bioconcentration potential of the major components of gasoline range from low to high.

Reference:
HSDB (2006) Gasoline

13 DISPOSAL CONSIDERATIONS

Waste Disposal

RCRA: Disposal of this product or material contaminated with this product may be regulated by RCRA due to the characteristic of ignitability or due to the toxicity characteristic of benzene.

EPA HAZARD CLASS: Acute Hazard/ Chronic Hazard/ Fire Hazard. Dispose of according to federal, state, and local regulations.

14 TRANSPORT INFORMATION

DOT: (Department of Transportation)

HAZARD CLASS: 3 Flammable Liquid

IDENTIFICATON NUMBER: UN 1203

15 REGULATORY INFORMATION

OSAH HAZARD COMMUNICAITON STANDARD: Contains components listed by ACGIH. Contains components listed by OSHA. Contains a carcinogenic component. Flammable liquid.

16 OTHER INFORMATION

Revision Information

Revision Date 3-29-06
Supersedes Revision Dated

Revision Summary

Reviewed and revised